

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 03177633
PUBLICATION DATE : 01-08-91

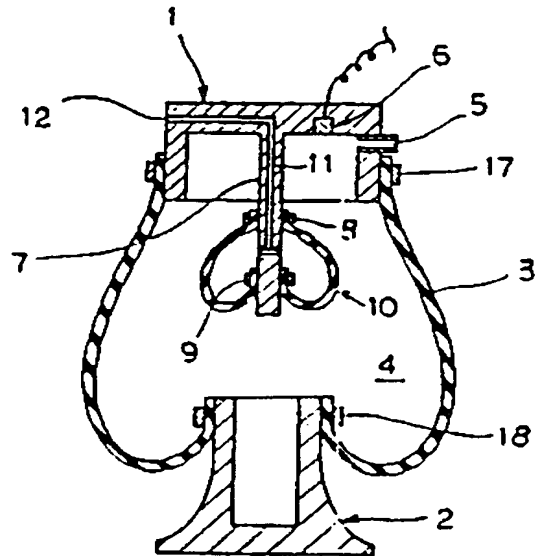
APPLICATION DATE : 26-12-89
APPLICATION NUMBER : 01335104

APPLICANT : BRIDGESTONE CORP;

INVENTOR : KAWAMATA SATOSHI;

INT.CL. : F16F 9/08 F16F 9/05 F16F 9/53

TITLE : AIR SPRING



ABSTRACT : PURPOSE: To continuously change a spring constant of an air spring by providing in an air chamber an expanding body which expands and contracts through supply and discharge of fluid carried out separately from supply and discharge of air into the air chamber.

CONSTITUTION: A diaphragm 3 is attached between an outer shell 1 and a cylinder 2, an air chamber 4 is provided inside, and a supply and discharge port 5 and a pressure sensor 6 are provided in the outer shell 1. An outer shell rod 7 is formed in the outer shell 1, an expanding body 10 is provided on it, and a fluid passage 11 is formed in the outer shell rod 7 so that supply and discharge of the fluid into the expanding body 10 can be carried out through a supply and discharge port 12. By changing inner pressure of the expanding body 10 provided in the air chamber 4, volume in the air chamber 4 can be continuously changed, and as a result, a spring constant can be continuously variable.

COPYRIGHT: (C)1991,JPO&Japio